

REMARKS

Reconsideration of this application, as amended, is requested.

Claims 1, 3, 4 and 7-10 remain in the application. Claim 1 has been amended slightly to eliminate the phrase "at least one of" appearing in the last subparagraph of independent claim 1. Thus, claim 1 now is limited to the optional configuration where both the rear surface of the connector housing and the front surface of the rubber plug hold-down member are provided with the previously claimed waterproof rib. In contrast, claim 1 prior to this amendment had been sufficiently broad to cover embodiments where the waterproof rib was provided on only the rear surface of the connector housing, only the front surface of the hold-down member or both the rear surface of the connector housing and the front surface of the rubber plug hold-down member. Thus, amended claim 1 now is limited to only that third option that was previously before the Examiner. This minor change clearly does not raise new issues that would require further consideration or searching by the Examiner because these precise limitations were presented previously to the Examiner. Independent claim 8 has not been amended and none of the dependent claims have been amended. Accordingly, entry of this fairly minor amendment after final rejection is believed to be appropriate.

Claims 1, 4, 8 and 10 were rejected under 35 USC 102(b) as being anticipated by the newly cited U.S. Patent No. 5,634,807 to Saito. Claims 3 and 9 were rejected under 35 USC 103(a) as being obvious over Saito. Claim 7 was rejected under 35 USC 103(a) as being obvious over Saito in view of the previously cited U.S. Patent No. 6,095,860 to Gehrke et al. Gehrke et al. was cited merely for its teaching of sealing lips on the outer periphery of a rubber plug.

Counsel and applicants do not dispute the relevancy of Gehrke et al. for the purpose for which the Gehrke et al. reference was cited. However, it is submitted that claims 1, 3 and 8-10 are not taught or suggested by Saito and that the Gehrke et al. reference does not overcome the deficiencies of Saito.

Saito is directed to a waterproof connector that includes a housing formed with cavities for receiving terminal fittings. A rubber seal is mounted to the rear end of the housing and is held in place by a cover. In the typical situation the rubber seal and the cover have holes aligned with each of the cavities of the connector housing for accommodating a terminated wire. The holes in the rubber seal are dimensioned for sealing engagement with the wire while the terminal fitting is secured in the housing. The cover merely holds the rubber seal in place, and the holes through the cover are significantly larger than the wires. Saito states that there may be certain instances where all of the terminal fittings are not required in a connector. In these situations, the holes in the rubber seal and in the cover provide a clear path for water to communicate with the interior of the connector housing, thereby creating the risk of damage to the terminal fittings and/or shorting between circuits. To address this problem, the holes in the rubber seal and/or the cover that correspond to an unused cavity are closed to prevent the entrance of water. Additionally, the rear face of the rubber seal and/or the front face of the cover are formed with a waterproof rib that surrounds the hole corresponding to the unused cavity. With this design, the closure in the cover prevents water from entering into the space between the cover and the rubber seal and hence migrating further into the connector, e.g. through the corresponding hole in the rubber seal. The waterproof rib on the rear face of the rubber seal and/or on the front face of the cover prevents water that may enter through an occupied hole in the cover from

migrating to an unoccupied hole in the rubber seal. Saito relies upon the engagement of the wire with the peripheral lips on the interior of the hole in the rubber seal to achieve sufficient sealing at those locations. Saito has no suggestion of a need for additional or enhanced sealing at those locations. Nothing in Saito suggests the waterproof rib on the rear end of the housing because such a rib would be useless for addressing the need recognized by Saito. In this regard, water that passes through an unoccupied hole in a rubber seal will flow unimpeded into the cavity regardless of whether a waterproof rib is formed around the periphery of one or more cavities on the rear end of the connector housing. Similarly, Saito has no waterproof ribs on the front face of the rubber seal for engaging the rear end of the connector housing. Ribs at this location also would serve no purpose for achieving the object described in detail in Saito. Saito also has no suggestion of a waterproof rib formed on the front face of the cover at a location that has a through hole formed in the cover. Rather waterproof ribs are provided on the Saito cover only at locations that have a continuous sealing portion 47 extending across what might otherwise be a through hole in the cover.

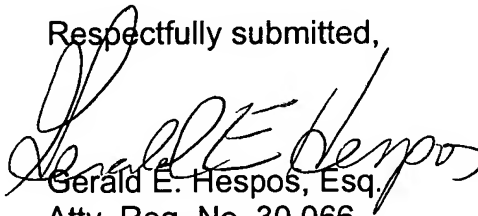
In contrast to Saito, the invention defined by previously amended claim 1 has a connector housing with a plurality of cavities for receiving terminal fittings. The cavities have rear open ends on a rear surface of the connector housing. The connector of previously amended claim 1 further has rubber plug with "opposite front end rear surfaces that are substantially planar in an unbiased condition of said plug." Through holes extend through the rubber plug of claim 1 from the front surface to the rear surface at positions corresponding to the respective cavities. Electric wires penetrate the through holes so that the electric wires are in close contact with the through holes. The connector of previously amended claim 1 further has a rubber plug

hold-down member with a front surface that presses the rear surface of the rubber plug for urging the rubber plug against the rear surface of the connector housing. Currently, amended claim 1 further defines at least one waterproof rib projecting “from the rear surface of the connector housing” so that the waterproof rib is pressed against the front surface of the rubber plug when the rubber plug is pressed against the rear surface of the connector housing for urging the front surface of the rubber plug into a nonplanar configuration so that a water penetration path passing inwards through a peripheral portion of the rubber plug is cut off before reaching the rear ends of the cavities. As noted above, Saito has no suggestion at all of a waterproof rib on the rear end of the connector housing and such a rib would have no function for achieving the stated purpose of the Saito connector. Accordingly, it is submitted that the invention defined by amended claim 1 and its dependent claims 3, 4 and 7 is not taught or suggested by Saito considered alone or in combination with Gehrke et al.

Independent claim 8 prior to this amendment similarly requires at least one waterproof rib that projects from the rear end of the connector housing so that said waterproof rib is pressed against said front surface of said rubber plug when said rubber plug is pressed against said rear surface of said connector housing so that the front surface is biased into a nonplanar configuration by the waterproof rib for secure sealing around the cavities. Claim 8 differs from claim 1 in that claim 1 also requires a rib on the hold-down member. However, all of the claims very clearly require a waterproof rib to be provided on the rear end of the connector housing. Saito has no suggestion of such a rib on the rear of the connector housing and such a rib would not solve any of the problems that are intended to be addressed by Saito. Nothing in Saito or the other references would motivate the skilled artisan to provide such a rib on the rear of the

housing without the benefit of hindsight gleaned from the subject application. Accordingly, it is submitted that the invention defined by the amended claims is not taught or suggested by Saito considered alone or in combination with secondary references and allowance of the claims is solicited. The Examiner is urged to contact applicant's attorney at the number below to expedite the prosecution of this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gerald E. Hespos", is written over the typed name.

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